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UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

PACIFIC NORTHWEST FOREST EXPERIMENT STATION

FOREST STATISTICS FOR CROOK COUNTY, OREGON

By Harry M. Wolfe.

CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
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MAY 28 1937

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
PACIFIC NORTHWEST FOREST EXPERIMENT STATION

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ADDRESS REPLY TO
DIRECTOR
AND REFER TO

424 U. S. COURT HOUSE,
MAIN AND SIXTH STREETS,
PORTLAND, OREGON

R-NW
Forest Survey
County Statistics

CALIFORNIA FOREST AND RANGE
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May 26, 1937

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Director,
California Forest Experiment Station,
332 Giannini Hall,
Berkeley, Calif.

Dear Mr. Kotok:

A copy of "Forest Statistics for Crook County, Oregon", the sixteenth of a series of Forest Survey mimeographed reports for eastern Washington and eastern Oregon, is enclosed for your files. The explanatory text, "The Forest Survey of Eastern Oregon and Eastern Washington", which accompanied the first report, should be referred to for detailed type descriptions and methods of survey procedure.

Previously forest statistics have been released for all counties in western Oregon and western Washington; for Klamath, Wasco, Jefferson, Harney, Lake, Deschutes, Morrow, and Baker Counties in eastern Oregon, and for Yakima, Klickitat, Chelan, Kittitas, Okanogan, Ferry, and Walla Walla, Columbia, Garfield, and Asotin Counties in eastern Washington. Additional copies of these reports are available for distribution.

Very truly yours,

THORNTON T. MUNGER, Director

By R. W. Cowlin
Acting

Enclosure

CALIFORNIA FOREST & RANGE EXPERIMENT STATION
330 GIANNINI HALL, UNIVERSITY OF CALIFORNIA
BERKELEY, CALIFORNIA

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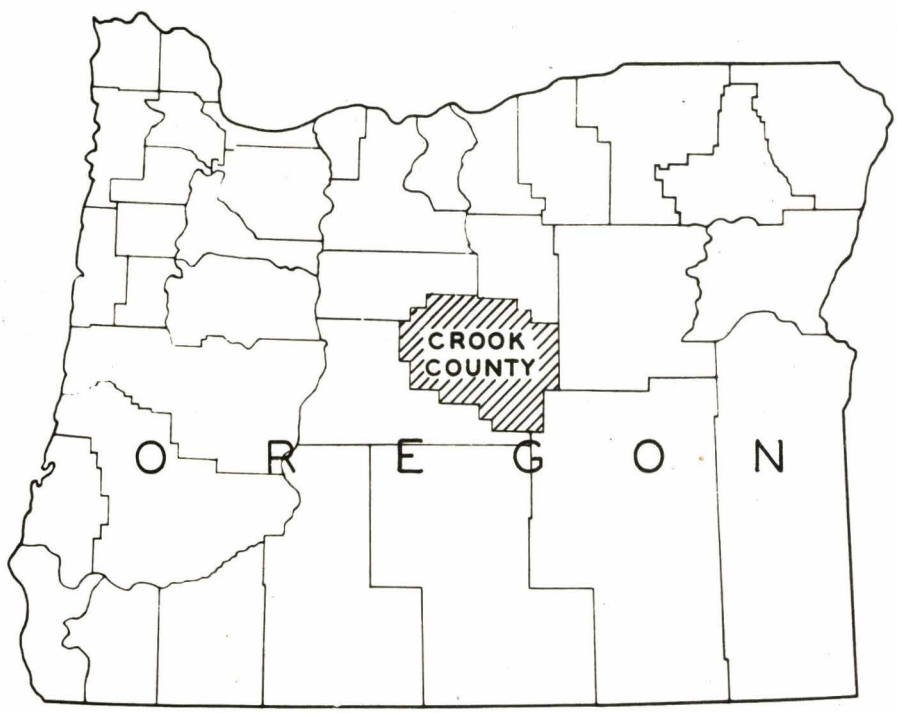
FOREST STATISTICS
FOR
CROOK COUNTY, OREGON

FROM THE INVENTORY PHASE OF THE FOREST SURVEY

I Forest Survey report no. 457



U. S. DEPARTMENT OF AGRICULTURE FOREST SERVICE
PACIFIC NORTHWEST FOREST EXPERIMENT STATION
THORNTON T. MUNGER, DIRECTOR

H. J. ANDREWS, IN CHARGE OF FOREST SURVEY R. W. COWLIN, ASSISTANT

HARRY M. WOLFE, IN CHARGE OF FIELD AND OFFICE WORK
IN CROOK COUNTY

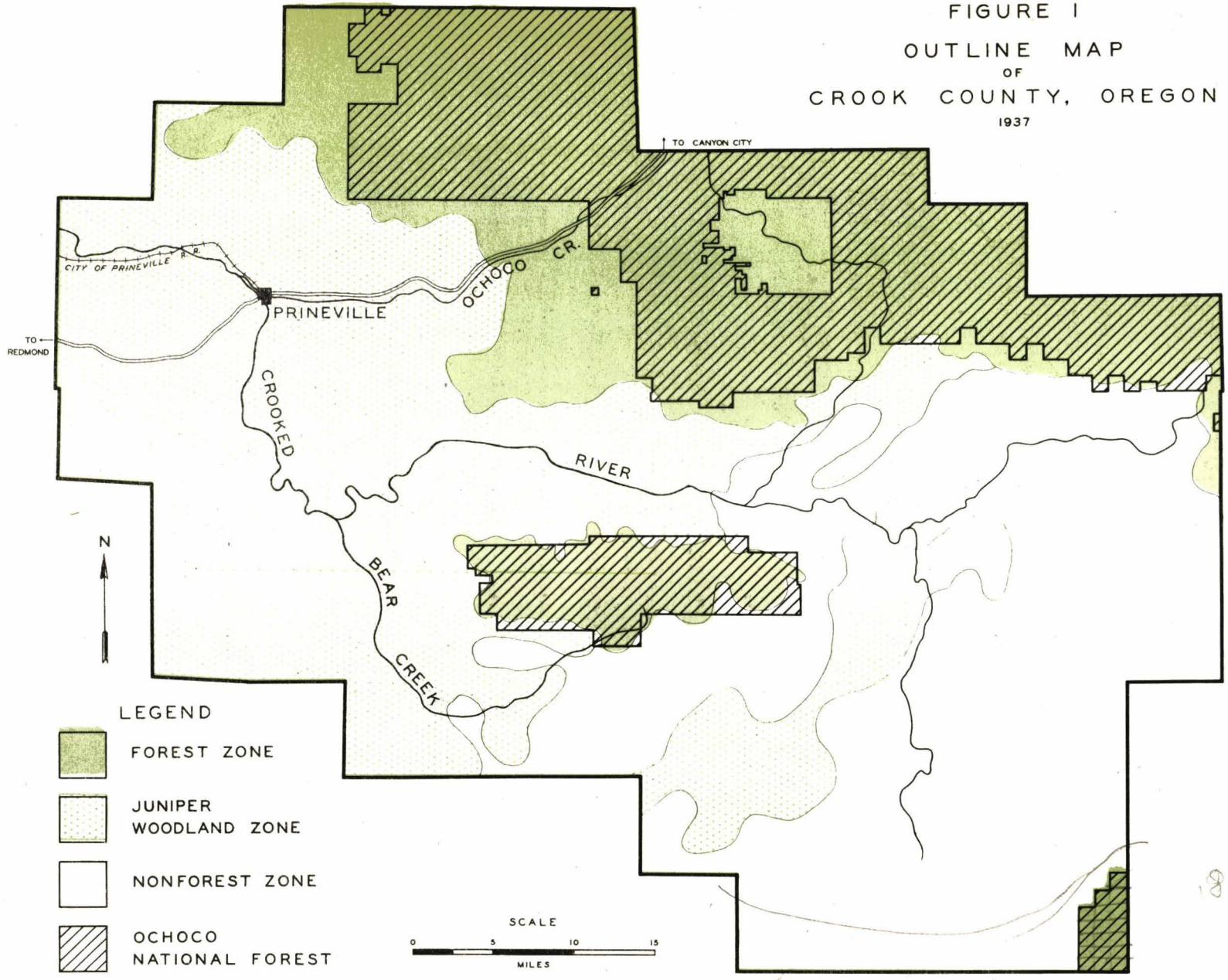
PORTLAND, OREGON MAY 25, 1937

CALIFORNIA FOREST & RANGE EXPERIMENT STATION
330 GIANNINI HALL, UNIVERSITY OF CALIFORNIA
BERKELEY, CALIFORNIA

FIGURE 1

OUTLINE MAP OF CROOK COUNTY, OREGON

1937



FOREST STATISTICS FOR CROOK COUNTY, OREGON

By Harry M. Wolfe[1/]

One of the largest virgin stands of ponderosa pine in Oregon is found in Crook County. Up to the present there has been very little exploitation of this resource, stock raising and agriculture being the principal activities. In the future the forests should play an increasingly important part in the economic development of the county.

The forest resources of the county were inventoried in 1935 and 1936 as part of a nation-wide forest survey conducted by the Forest Service.[2/] Results of this inventory, summarized in four tables and shown graphically in four figures, are included in this report. The methods of the survey and detailed definitions of forest types are contained in "The Survey of Eastern Oregon and Eastern Washington", an explanatory text that should be read in connection with this report.

Location and Description of County

Located in practically the geographical center of Oregon, Crook County is bounded on the north by Jefferson and Wheeler Counties, on the east by Harney and Grant Counties, and on the south and

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1/ THE FIELD AND OFFICE WORK OF THE FOREST SURVEY OF CROOK COUNTY WAS DONE BY H. M. WOLFE, P. A. BRIEGLEB, C. S. SMITH, L. E. TUCKER, W. V. S. LITCHFIELD, P. D. KEMP, F. L. MORAVETS, G. BAILEY, P. N. PRATT, G. E. ALLMAN, M. L. LAURIDSEN, A. W. HODGMAN, H. H. ARMSTRONG, B. E. BENNETT, C. E. BROWN, MARION BECQUET, H. A. DE RICE, AND C. L. DE WOLFE.

2/ OREGON AND WASHINGTON WERE DIVIDED FOR PURPOSES OF THE SURVEY INTO TWO REGIONS (1) THE DOUGLAS FIR REGION, CONSISTING OF THAT PART OF BOTH STATES WEST OF THE SUMMIT OF THE CASCADE RANGE, AND (2) EASTERN OREGON AND EASTERN WASHINGTON, THAT PART OF BOTH STATES EAST OF THE SUMMIT OF THE CASCADE RANGE. EACH REGION WAS DIVIDED INTO FOREST SURVEY UNITS COMPOSED OF ONE OR MORE COUNTIES. AT A LATER DATE A REPORT WILL BE ISSUED FOR EACH SURVEY UNIT PRESENTING A TEXTUAL DESCRIPTION OF THE UNIT, DETAILED INVENTORY SUMMARIES, AND STATISTICS OF GROWTH AND DEPLETION ANALYZED IN THE LIGHT OF THE INVENTORY. A REGIONAL REPORT WILL ALSO BE ISSUED WHICH WILL PRESENT AND DISCUSS FINDINGS FOR THE REGION AS A WHOLE. THE REGIONAL REPORT WILL INCLUDE AN INTERPRETATION OF THE FOREST SURVEY DATA AS RELATED TO OTHER ECONOMIC DATA AND A COMPREHENSIVE ANALYSIS OF THE REGIONAL FOREST SITUATION FROM BOTH A PHYSICAL AND AN ECONOMIC STANDPOINT.

west by Deschutes County. The county is about 72 miles long, varies from 18 to 51 miles wide, and has a land area of approximately 1,877,760 acres.3/

It is drained by Crooked River and its tributaries; McKay Creek in the northwestern, Ochoco Creek in the northcentral, Beaver Creek in the eastern, and Bear Creek in the southern part of the county. Crooked River rises in the eastern part of the county at an elevation of about 4,500 feet and flows generally west and northward through a narrow valley with sharp canyon walls from 100 to 600 feet high until it reaches a point about one mile south of Prineville where the valley widens to three or four miles and continues almost to the point where the river leaves the county at an elevation of about 2,700 feet.

A spur of the Blue Mountain Range extends across the northern part of the county from the eastern boundary to a point north of Prineville. Elevations in this spur vary from about 4,000 to 6,000 feet with the higher points found near the eastern border of the county. The northwestern portion and that part of the county which lies east of Crooked River and Bear Creek is undulating, rising to an elevation of 6,333 feet on Hampton Butte in the southcentral part of the county. The part which lies west and south of Crooked River and Bear Creek is a sloping plateau with an elevation of about 3,100 feet on the north, rising to nearly 4,000 feet in the southwest corner of the county, and interrupted by abrupt buttes of about 5,000 feet elevation. The Great Sandy Desert extends into the southeast portion of the county just east of Hampton Butte for a distance of about 20 miles.

There is not as wide a range of annual precipitation within Crook County as in other eastern Oregon counties, due no doubt to the absence of extremely high mountain ranges. The Weather Bureau records for the past 30 years show an average precipitation of 9.4 inches at Prineville. In the forest area the annual precipitation probably ranges from 15 to 20 inches annually, and in the Great Sandy Desert area it is, no doubt, as low as five inches annually.

History and Agricultural Development

The first settler in what is now Crook County came in 1868 and built his home near the mouth of Mill Creek. The county was first organized in 1882 and at that time embraced an area of about 8,600 square miles, including all of Deschutes, Jefferson, and that part of Wheeler County which lies south of the John Day River. In

3/ BUREAU OF CENSUS REPORT FOR 1930.

1899 a part of the county was taken to form Wheeler County, and in 1915 and 1916 the area of the county was further reduced to 2,934 square miles.[4]

Crook County was the scene of a bitter range war between cattlemen and sheepmen in 1904 and 1905. In order to drive the sheep from the range the cattlemen organized and held moonlight sheep-shooting raids, killing as many as 500 in one night and scattering the rest of the bands. These raids caused an immediate reduction in the sheep population.

The county is sparsely inhabited with a total population of 3,336,[5] of an average of only 1.1 persons per square mile. Two-thirds of the population are residents on ranches and farms.

Prineville, located at the junction of Ochoco Creek and Crooked River, is the only incorporated town in the county and had a population of 1,027 in 1930. It is the trading center for the county and is in the Ochoco irrigation project which contains about 22,000 acres, with diversified crops and dairying the principal activities.

The Powell Valley irrigation district, located about eight miles west of Prineville along the Ochoco Highway has 13,000 acres under irrigation, using water from the Deschutes River, and is one of Oregon's most prosperous districts. Diversified farming is practiced, the principal crops being alfalfa, "Netted Gem" potatoes, red clover, wheat, oats, and barley.

The Bureau of the Census report for 1930 shows stock raising as the principal source of farm income for the county with considerable income also derived from dairying, hay, and potatoes, small grains and general farming. The total value of farm products sold and used in 1929 was nearly two million dollars. In 1935 there were 31,830 cattle and 67,431 sheep in the county.[6]

Mineral Resources

Mineral resources have been of minor significance in the economy of the county. A few small mines are operating in the Lookout Mountain district producing principally gold and mercury. Deposits of gypsum and limestone are also found in the county.

4/ BUREAU OF CENSUS REPORT FOR 1930.
5/ BUREAU OF CENSUS REPORT FOR 1930.
6/ BUREAU OF CENSUS REPORT FOR 1935.

Highway and Road Development

The Ochoco Highway connecting The Dalles-California Highway with the John Day Highway and a splendid system of market and Forest Service roads make all parts of the county accessible.

Prineville is connected with the Oregon Trunk Railway at Redmond by the City of Prineville Railway, a municipally owned system. This railway, owned and managed by the city of Prineville, is 19 miles in length and at present operates one train a day between Prineville and Redmond.

Vegetative Cover

Crook County may be divided into three broad vegetative zones, the nonforest zone, the juniper woodland zone, and the forest zone, determined largely by precipitation and elevation. (Figure 1.)

The Nonforest Zone

The nonforest zone contains 890,460 acres or about 47 percent of the county's land area (table 4). The greater part of this zone is located south of Crooked River in the eastern part of the county (figure 1). It consists of sagebrush-covered hills and desert land. The remaining nonforest land includes the Ochoco Creek and lower Crooked River Valleys and natural openings in the forest and juniper woodland zones. One of the larger natural openings in the forest zone is Big Summit Prairie, which is located in the north-central part of the county and contains about 17,000 acres.

Prior to settlement, "The bottoms were covered with wild rye, clover, pea vine, wild flax, and meadow grass that was waist high to a man on horseback. The hills were clothed with a mat of bunch grass that seemed inexhaustible."7/ Because of excessive and unregulated grazing by sheep, cattle, and horses the bunch grass and other grasses have been largely replaced by sagebrush.

The Juniper Woodland Zone

Although western juniper is found scattered throughout the country on the upper slopes of buttes, the larger part of the type area lies in the western quarter of the county and in a strip about ten miles wide extending up Crooked River to the nonforest zone (figure 1). This area forms a part of the largest juniper forest in the world, found as a transition between the sagebrush desert on the south and the bunchgrass prairie on the north, and lying be-

7/ HISTORY OF CENTRAL OREGON, 1905.

tween the Cascade Range and the Blue Mountains.[8] A smaller area is located in the south-central part of the county and extends northward almost to Crooked River. Other small areas are found in the forest zone on the dryer slopes. The total area in this type is 510,195 acres (table 3).

Because it seldom attains saw-timber size and quality in the county the volume of western juniper was estimated by the survey in cords only. Ordinarily the trees are short, bushy, and gnarled and are used only for fuel wood and fence posts. In the area west of Crooked River and Bear Creek the trees occasionally grow to 50 feet in height and 40 inches in diameter at one foot above ground but are unsound and of very poor quality. Tests have been made with samples selected in the juniper forest to determine if western juniper could be used for pencil stock. Most of the trees were found to be too small, knotty, decayed, or of a poor color. The percentage of good pencil stock that can be cut from western juniper was found to be too small to be profitable for the operator.

There are three important classes of ownership in the juniper zone: 44 percent of the area is in private ownership, 42 percent is in the public domain, and about 7 percent is owned by the county.

The Forest Zone

The forest zone contains 477,105 acres (table 2) or about 30 percent of the total area of the county, and is in three separate areas (figure 1).[9]

The largest forested area is located in the northern part of the county and extends from a point almost north of Prineville eastward about 60 miles to the Grant County line, varying from 5 to 25 miles in width. The second largest area lies south of the main timbered area in a strip about six miles wide and 20 miles long, forming a distinct island of timber surrounded by open sagebrush land. The third and smaller area, containing about 10,000 acres, is in the extreme southeastern corner of the county and is an extension of a large body of virgin pine timber in northern Harney County.

8/ LAWRENCE, W. E., NATURALIST'S GUIDE TO THE AMERICANS, 1926.

9/ LOCATION AND EXTENT OF FOREST TYPES ARE SHOWN BY FOREST SURVEY TYPE MAPS. INFORMATION REGARDING 1-INCH-TO-THE-MILE COUNTY TYPE MAPS AND ¼-INCH-TO-THE-MILE LITHOGRAPHED STATE TYPE MAPS AND HOW THEY MAY BE OBTAINED WILL BE FURNISHED UPON REQUEST. ADDRESS DIRECTOR, PACIFIC NORTHWEST FOREST EXPERIMENT STATION, 423 U. S. COURT HOUSE, PORTLAND, OREG.

More than 70 percent of the forest zone is within the boundaries of the Ochoco National Forest, with about 20 percent of this area principally in private ownership.

Commercial forest types predominate in the stands composing the forest zone, almost 95 percent being occupied by forests of saw-timber size over 12 inches in diameter breast high. Of this area 96 percent, 453,635 acres (table 3), is in stands of ponderosa pine with average volumes of from 6 to 18 M per acre, except in the pine woodland types, and of a quality which compares favorably with stands of this species found in other parts of eastern Oregon. Types with Douglas fir predominant in volume and mixed stands of Douglas fir, western larch, Engelmann spruce, lowland white fir, and some saw-timber size lodgepole pine make up the other 4 percent of the commercial timber types. These latter stands are found on high moist sites on the north slope of Lookout Mountain and scattered along the north slope of the Blue Mountains at elevations of approximately 5,500 feet. The largest area, about 11,000 acres, is in the northwestern part of the forest zone.

Ponderosa pine stands of saw-timber size occupy an area of 434,985 acres (table 3). About 70 percent of these stands are pure old-growth ponderosa pine more than 22 inches in diameter breast high, and about 12 percent are in mixed stands where Douglas fir, western larch, or lowland white fir are associated with the pine. The mixed stands are found on the more moist sites of the upper slopes, northern exposures, and stream bottoms. Toward the lower limits of the forest zone and on dry and unfavorable sites are found scattered stands of mature ponderosa pine of a woodland character with a low volume varying from 0.5 to 3 M per acre.

A small percent of the pine stands, 24,430 acres (table 2), are of immature ponderosa pine 12 to 22 inches in diameter breast high, and have an average volume of from 1 to 3 M per acre. Less than one-half of this type is the result of selective logging by small mills; the remainder came in on old burns and pine-beetle-infested areas.

The pine reproduction types, poles, saplings, and seedlings less than 12 inches diameter breast high are found on only 15,760 acres (table 3), and only one-third of these types are a result of logging. Most of the immature ponderosa pine stands are of uneven age and medium to well stocked.10/

10/ FOR DEFINITION OF STOCKING SEE EXPLANATORY TEXT, "THE FOREST SURVEY OF EASTERN OREGON AND EASTERN WASHINGTON."

A very small area of lodgepole pine types is found in the county. The greater part of the lodgepole pine in the county is less than 12 inches diameter breast high, and the largest area of the type is in the northwest corner of the forest zone.

Noncommercial forest types consisting of rocky, inaccessible, and subalpine areas at the upper limits of forest growth cover only 2,585 acres in the county (table 3).

Less than 1,000 acres of deforested burns and no nonstocked cut-over land was found in the forest zone.

Productive Capacity of the Forest Land

Table 4 shows the classification of forest land as to site quality or relative productive capacity. Of the 470,580 acres so classified more than 96 percent was rated according to ponderosa pine classification, the remainder being Douglas fir site. Over 73 percent of the ponderosa pine land is rated site IV, which is about average for the region.

Saw-Timber Volume

Of the total volume of saw timber in the county, 5,315,990 M board feet, log scale (table 1), 86 percent is ponderosa pine, about 8 percent Douglas fir, and the remaining 6 percent white fir, western larch, Engelmann spruce, and lodgepole pine. Private interests control 38 percent of the ponderosa pine volume and 35 percent of the volume of all species in the county, and 62 percent of the total saw-timber volume is on national forest land. The ownership class "Railroad Selection Pending" includes grant lands within the boundary of the national forests for which patents are still pending, and contains 1 percent of the saw-timber volume for the county. The remaining 2 percent is in public domain, State and county ownerships.

Insect Losses

The period 1931-1933 was a disastrous one for the ponderosa pine stands of Crook County. Areas which had been practically free from western pine beetle (Dendroctonus brevicomis) activity for many years suddenly developed outbreaks of unprecedented virulence. The "Annual Report of the Forest Insect Conditions in Oregon and Washington for 1933", prepared by the Bureau of Entomology and Plant Quarantine, estimates a loss in the county of approximately 375 million board feet of ponderosa pine for this period, which far overshadows the losses from both fire and cutting for many decades. Due to control operations, started in 1932, by the Forest Service and Klamath

Forest Protective Association, extreme low temperatures of the winter of 1933-1934, and the return of more favorable moisture conditions for tree growth, these losses are now almost normal in all parts of the county except in small scattered areas within which the loss is still about 1 percent of the stands each year.

Forest Land Utilization

The forest area produces forage for a large number of cattle and sheep each year in addition to the game animals in the county. In the 1936 grazing season approximately 4,000 cattle and 27,000 sheep were grazed in that part of the Ochoco National Forest which is within the county.

According to the Forest Service annual game census of 1936 it is estimated there are 10,000 mule deer, 400 antelope, and 20 elk in the county. The number of sportsmen visiting this area has increased each year. In the hunting season of 1936 about 6,500 hunters registered in the Ochoco National Forest.

The forest area has been an important factor in the conservation of water supply for the farming districts and regulation of stream flow, as the principal streams in the county have their headwaters in the forest zone.

There has been very little logging development in the county, being confined to a few small local mills with a daily capacity of from 4 to 30 thousand board feet. The total area cut to date is less than 17,000 acres.

Most of the commercial timber is easily accessible to existing roads, and logging conditions are very good. The timbered area is practically free of sharp, rocky canyons except for the breaks along parts of the north fork of Crooked River.

All of the forest area except a small strip along the northwest boundary and the small area in the extreme southeastern part of the county is a natural operating unit. The Forest Service, in cooperation with private owners, is at the present time working on plans to open this area on a sustained yield basis.

FOREST STATISTICS FOR CROOK COUNTY, OREGON
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 1. VOLUME OF TIMBER BY SPECIES AND OWNERSHIP CLASS
DATA CORRECTED TO AUGUST 1, 1936

TREES 12" AND MORE IN D.B.H.
THOUSANDS OF BOARD FEET, LOG SCALE, SCRIBNER RULE

SURVEY SYMBOL	SPECIES	PRIVATE	STATE, AVAILABLE FOR CUTTING	COUNTY	MUNICIPAL	FEDERAL			TOTAL
						PUBLIC DOMAIN	RAILROAD SELECTION PENDING	NATIONAL FOREST, AVAILABLE FOR CUTTING	
Y	PONDEROSA PINE	1,766,967	3,120	17,374		79,358	50,969	2,694,058	4,611,846
LP	LODGEPOLE PINE	424						5,254	5,678
DF	DOUGLAS FIR	72,720	10	552		1,485		328,472	403,239
WF	LOWLAND WHITE FIR	23,917				7		137,969	161,893
WL	WESTERN LARCH	15,573				103		117,393	133,069
ES	ENGELMANN SPRUCE							265	265
	TOTAL	1,879,601	3,130	17,926		80,953	50,969	3,283,411	5,315,990

VOLUME OF CORDWOOD SPECIES
TREES 4" OR MORE IN DIAMETER 1' ABOVE GROUND
CORDS

WJ	WESTERN JUNIPER	329,290	22,620	94,870	130	636,390		16,380	1,099,680
MM	MOUNTAIN MAHOGANY	650				640		4,350	5,640
ASP	ASPEN	40						170	210
	TOTAL	329,980	22,620	94,870	130	637,030		20,900	1,105,530

FOREST STATISTICS FOR CROOK COUNTY, OREGON
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 2. AREA, IN ACRES, OF ALL FOREST COVER TYPES, BY OWNERSHIP CLASS
DATA CORRECTED TO AUGUST 1, 1936

SURVEY TYPE NO.	TYPE DEFINITION	PRIVATE	STATE, AVAILABLE FOR CUTTING	COUNTY	MUNICIPAL	FEDERAL: PUBLIC DOMAIN	FEDERAL: RAILROAD SELECTION PENDING	FEDERAL: NATIONAL FOREST, AVAILABLE FOR CUTTING	TOTAL
	WOODLAND:								
5A	DENSE JUNIPER: JUNIPER OR MOUNTAIN MAHOGANY FORESTS OCCUPYING 10% OR MORE OF THE LAND AREA	34,190	2,005	10,885		74,960		135	122,175
5B	SCATTERED JUNIPER: JUNIPER OR MOUNTAIN MAHOGANY FORESTS OCCUPYING 5 TO 10% OF THE LAND AREA	193,080	9,035	24,890	85	143,605		17,325	388,020
5½	PONDEROSA PINE WOODLAND: SCATTERED STANDS OF MATURE PONDEROSA PINE ON UNFAVORABLE SITES	12,245	130	795		2,845	175	10,415	26,605
	PONDEROSA PINE: FORESTS CONTAINING 50% OR MORE OF PONDEROSA PINE								
20	PONDEROSA PINE, LARGE: FORESTS CONTAINING 50 TO 80% OF PONDEROSA PINE, MORE THAN 22" DBH	3,709				25		33,990	37,715
20.5	PURE PONDEROSA PINE, LARGE: FORESTS CONTAINING 80% OR MORE OF PONDEROSA PINE, MORE THAN 22" DBH	126,350	355	1,275		8,415	4,020	189,795	330,210
21	PONDEROSA PINE, SMALL: 12 TO 22" DBH	8,670	10	1,525		1,640	25	12,560	24,430
22	PONDEROSA PINE SEEDLINGS, SAPLINGS, AND POLES: LESS THAN 12" DBH	8,120	40	1,090		995		5,245	15,490
	PINE MIXTURE: MIXED FORESTS CONTAINING 20 TO 50% OF PONDEROSA PINE								
27	PINE MIXTURE, LARGE: 12" OR MORE DBH	2,570				10		13,445	16,025
28	PINE MIXTURE, SMALL: LESS THAN 12" DBH	20						250	270
	DOUGLAS FIR: FORESTS CONTAINING 60% OR MORE OF DOUGLAS FIR								
7	DOUGLAS FIR, SMALL OLD GROWTH: 22 TO 40" DBH	20						910	930
8	DOUGLAS FIR, LARGE SECOND GROWTH: 22 TO 40" DBH							135	135
	UPPER-SLOPE MIXTURE: MIXED FORESTS OF WESTERN LARCH, DOUGLAS FIR, ENGELMANN SPRUCE, LOWLAND WHITE FIR, OR LODGEPOLE PINE; OCCASIONALLY OTHER SPECIES								
27½	UPPER-SLOPE MIXTURE, LARGE: 12" OR MORE DBH	1,310						14,895	16,205
28½	UPPER-SLOPE MIXTURE, SMALL: LESS THAN 12" DBH							245	245
	LOWLAND WHITE FIR: FORESTS CONTAINING 50% OR MORE OF LOWLAND WHITE FIR:								
29	LOWLAND WHITE FIR, LARGE: 12" OR MORE DBH							1,380	1,380
	LODGEPOLE PINE: FORESTS CONTAINING 50% OR MORE OF LODGEPOLE PINE								
25	LODGEPOLE PINE, LARGE: 12" OR MORE DBH	255						30	285
26	LODGEPOLE PINE, MEDIUM: 6 TO 10" DBH	20						2,490	2,510
26A	LODGEPOLE PINE, SMALL: LESS THAN 6" DBH							135	135
	HARDWOOD: FORESTS CONTAINING 50% OR MORE OF ASPEN								
31	HARDWOOD, SMALL: LESS THAN 12" DBH	15						20	35
33	SUBALPINE: FORESTS AT UPPER LIMITS OF TREE GROWTH, USUALLY UNMERCHANTABLE							825	825
	DEFORESTED AREAS: NONRESTOCKED AREAS DEFORESTED OTHERWISE THAN BY CUTTING								
37	DEFORESTED BURNS	275				1,010		630	1,915
38	NONCOMMERCIAL ROCKY AREAS	260				520		980	1,760
	TOTALS FOR FOREST LAND	391,100	11,575	40,460	85	234,025	4,220	305,835	987,300
1 & 2	NONFOREST LAND: CULTIVATED, GRASS, SAGEBRUSH, BARRENS, CITIES, UNMEANDERED WATER SURFACES, ETC.	832,070 ACRES OF NONFOREST LAND UNCLASSIFIED BY OWNERSHIP:					900	57,490	890,460
	TOTALS FOR COUNTY						5,120	363,325	1/ 1,877,760

1/ THE TOTAL AREA OF THE COUNTY, ACCORDING TO THE BUREAU OF THE CENSUS, IS 1,877,760 ACRES. OF THIS TOTAL, 1,045,690 ACRES WAS CLASSIFIED AS TO OWNERSHIP BY THE FOREST SURVEY.

FOREST STATISTICS FOR CROOK COUNTY, OREGON
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 3. AREA, IN ACRES, OF GENERALIZED FOREST TYPES, BY OWNERSHIP CLASS
DATA CORRECTED TO AUGUST 1, 1936

TYPE DEFINITION		PRIVATE	STATE, AVAILABLE FOR CUTTING	COUNTY	MUNICIPAL	FEDERAL: PUBLIC DOMAIN	FEDERAL: RAILROAD SELECTION PENDING	FEDERAL: NATIONAL FOREST, AVAILABLE FOR CUTTING	TOTAL
WOODLAND: JUNIPER									
SURVEY TYPES 5A AND 5B		227,270	11,040	35,775	85	218,565		17,460	510,195
HARDWOOD: ASPEN									
SURVEY TYPE 31		15						20	35
PONDEROSA PINE 12" OR MORE DBH									
SURVEY TYPES 5½, 20, 20.5, 21, AND 27		153,535	495	3,595		12,935	4,220	260,205	434,985
PONDEROSA PINE LESS THAN 12" DBH	ON CUTOVER AREAS	4,360		875		150		220	5,605
SURVEY TYPES 22 AND 28	ON OLD BURNS	3,780	40	215		845		5,275	10,155
	TOTAL	8,140	40	1,090		995		5,495	15,760
CONIFERS 12" OR MORE DBH OTHER THAN PONDEROSA PINE AND LODGEPOLE PINE									
SURVEY TYPES 7, 8, 27½, AND 29		1,330						17,320	18,650
CONIFERS LESS THAN 12" DBH OTHER THAN PONDEROSA PINE AND LODGEPOLE PINE									
SURVEY TYPE 28½	ON OLD BURNS							245	245
LODGEPOLE PINE 12" OR MORE DBH									
SURVEY TYPE 25		255						30	285
LODGEPOLE PINE LESS THAN 12" DBH									
SURVEY TYPES 26 AND 26A		20						2,625	2,645
NONCOMMERCIAL AREAS									
SURVEY TYPES 33 AND 38		260				520		1,805	2,585
DEFORESTED BURNS									
SURVEY TYPE 37		275				1,010		630	1,915
TOTALS FOR FOREST LAND		391,100	11,575	40,460	85	234,025	4,220	305,835	987,300
NONFOREST LAND									
SURVEY TYPES 1 AND 2		832,070 ACRES OF NONFOREST LAND UNCLASSIFIED BY OWNERSHIP					900	57,490	890,460
TOTALS FOR COUNTY							5,120	363,325	1/ 1,877,760

1/ THE TOTAL AREA OF THE COUNTY, ACCORDING TO THE BUREAU OF THE CENSUS, IS 1,877,760 ACRES. OF THIS TOTAL, 1,045,690 ACRES WAS CLASSIFIED AS TO OWNERSHIP BY THE FOREST SURVEY.

FOREST STATISTICS FOR CROOK COUNTY, OREGON
FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 4. AREA OF FOREST LAND, BY SITE QUALITY
DATA CORRECTED TO AUGUST 1, 1936

TYPE	SITE QUALITY CLASS[1]		AREA			
			ACRES	PERCENTAGE OF--- CONIFEROUS FOREST LAND CLASSIFIED AS TO SITE QUALITY	PERCENTAGE OF--- TOTAL FOREST LAND[2]	PERCENTAGE OF--- TOTAL AREA OF COUNTY
PONDEROSA PINE, PONDEROSA PINE MIXTURE, AND WHITE FIR	PONDEROSA PINE	III	26,285	5.6	2.7	1.4
		IV	331,205	70.4	33.5	17.6
		V	92,075	19.5	9.3	4.9
		VI	3,500	.8	.4	.2
			453,065	96.3	45.9	24.1
DOUGLAS FIR AND UPPER-SLOPE MIXTURE	DOUGLAS FIR	IV	1,750	.4	.2	.1
		V	15,765	3.3	1.6	.9
			17,515	3.7	1.8	1.0
TOTAL			470,580	100.0	47.7	25.1
JUNIPER			511,170[3]		51.7	27.2
LODGEPOLE PINE			2,930		.3	.2
NONCOMMERCIAL ROCKY AREAS			1,760		.2	.1
SUBALPINE			825		.1	
HARDWOOD			35			
TOTAL			516,720		52.3	27.5
GRAND TOTAL			987,300		100.0	52.6

1/ THE "SITE QUALITY" OF A FOREST AREA IS ITS RELATIVE PRODUCTIVE CAPACITY, DETERMINED BY CLIMATIC, SOIL, TOPOGRAPHIC, AND OTHER FACTORS. THE INDEX OF SITE QUALITY IS THE AVERAGE HEIGHT OF THE DOMINANT STAND AT THE AGE OF 100 YEARS. SIX SITE QUALITY CLASSES ARE RECOGNIZED FOR PONDEROSA PINE AND FIVE FOR DOUGLAS FIR, CLASS I BEING IN EACH CASE THE HIGHEST. IN THE SURVEY THE PONDEROSA PINE AND DOUGLAS FIR CLASSIFICATIONS, RESPECTIVELY, WERE USED NOT ONLY FOR TYPES OF WHICH THESE SPECIES ARE CHARACTERISTIC COMPONENTS BUT FOR OTHER TYPES FOR WHICH NO SITE QUALITY CLASSIFICATIONS HAVE BEEN DEVELOPED.

2/ THE TOTAL AREA OF THE COUNTY (ACCORDING TO THE REPORT OF THE BUREAU OF THE CENSUS FOR 1930) IS 1,877,760 ACRES. OF THIS TOTAL, ACCORDING TO FOREST SURVEY DATA, 987,300 ACRES (52.6 PERCENT) IS FOREST LAND AND 890,460 ACRES (47.4 PERCENT) IS NONFOREST LAND.

3/ INCLUDES 975 ACRES OF DEFORESTED BURN, 3,940 ACRES OF JUNIPER-MOUNTAIN MAHOGANY MIXTURE, AND 430 ACRES OF MOUNTAIN MAHOGANY.

FOREST STATISTICS FOR CROOK COUNTY, OREGON

FROM INVENTORY PHASE OF FOREST SURVEY

FIGURE 2. DISTRIBUTION OF SAW-TIMBER VOLUME BY SPECIES AND OWNERSHIP CLASS (FROM TABLE 1)

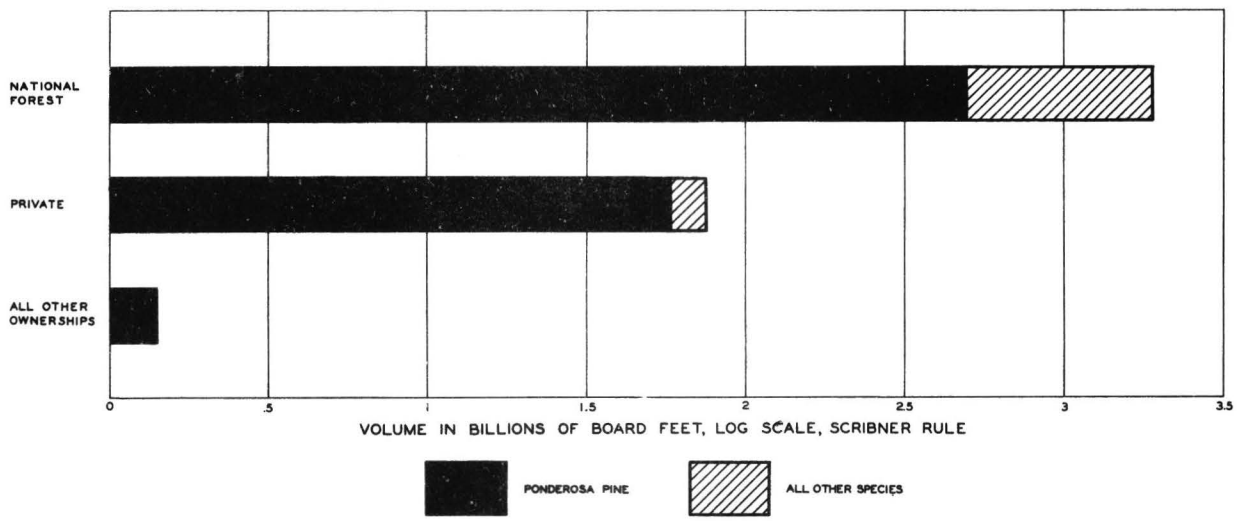

FIGURE 3. OWNERSHIP OF FOREST LAND (FROM TABLE 2)

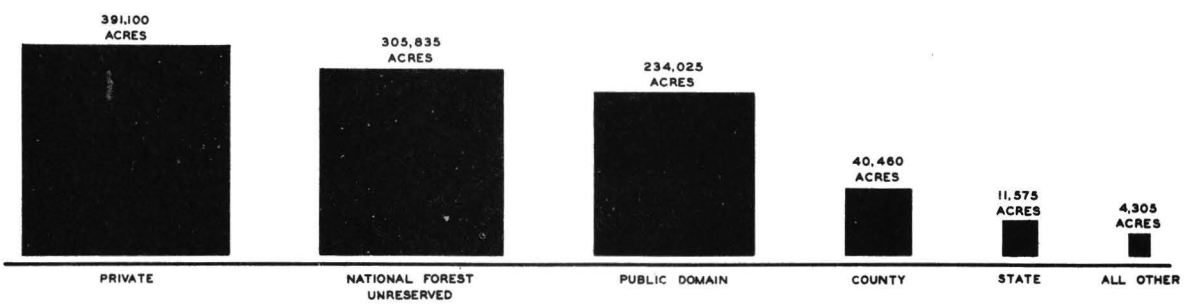

FIGURE 4. DISTRIBUTION OF FOREST LAND BY GENERALIZED TYPES ALL OWNERSHIP CLASSES (FROM TABLE 3)